



UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Lichtenhan et al. Docket No.: 38559-0282005

Serial No.: 09/631,892 Group Art Unit: 1712

Filing Date: March 26, 2001 Examiner: Robertson, Jeffrey

For: **PROCESS FOR THE FORMATION OF POLYHEDRAL
OLIGOMERIC SILSESQUIOXANES**

AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Please amend this application as follows:

In the Specification

The specification is amended as follows:

Please replace the paragraph beginning at page 2, line 1, with the following rewritten paragraph:

1 Prior art has reported that bases (e.g., NaOH, KOH, etc.) could be used to both catalyze
2 the polymerization of POSS into lightly networked resins or to convert selected
3 polysilsesquioxane resins into homoleptic polyhedral oligomeric silsesquioxane structures.
4 Marsmann et al have more recently shown that a variety of bases can be used to redistribute
5 smaller homoleptic POSS cages into larger sized homoleptic cages. (Marsmann, H.C. and
6 Rikowski, E., Polyhedron, 1997, 16, 3357-3361). While there is precedent in the literature for
7 treatment of silsesquioxanes and POSS systems with base, the previous art does not afford the
8 selective manipulation of silicon-oxygen frameworks and the subsequent controlled production
9 of POSS fragments, homoleptic POSS nanostructures, heteroleptic POSS nanostructures and
10 functionalized heteroleptic POSS nanostructures. Furthermore, the prior art does not provide

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